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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,169	09/26/2003	Adam Tartar Richardson	0-02-141.01	8100

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EXAMINER

NGUYEN, DINH Q

ART UNIT PAPER NUMBER

3752

DATE MAILED: 07/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/672,169

Applicant(s)

RICHARDSON ET AL.

Examiner

Dinh Q. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/13/05 and the petition granted 4/06.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-5,7,11-13 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-5,7,11-13 and 15-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2-5, and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claims 2, and 7, the limitation "a first fire suppressing gas mixture" is indefinite for not citing the second suppressing gas mixture.
3. For the purpose of this Office action, the claims will be examined as best understood by the examiner.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 4, 5, 7, 11-13, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holland et al. in view of Hardge as best understood by the Examiner.

Holland et al. teaches all the limitations of the claims except for a filtering out a percentage of a second gas from the first mixture. Hardge teaches a method of suppressing fire with a first gas comprising nitrogen (see column 3, line 18), a filter for filtering a second gas (see column 2, lines 40-46 and column 3, lines 60-64), an inert gas discharge diffuser 12. Therefore, it would have been obvious to one having ordinary

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skill in the art to have provided the device of Holland et al with a screen filter as suggested by Hardge. Doing so would provide an environmental friendly fire suppression system (see column 2, lines 40-46).

6. Claims 17, 18, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parkinson et al. in view of Canterbury et al. as best understood by the Examiner.

Parkinson et al. disclose a gas generator for generating and delivering a fire suppressing gas mixture to an enclosed space, comprising a housing 112, a pre-packed solid propellant canister 116 disposed within the housing, a pyrotechnic device 182 for igniting the solid propellant canister and generating a fire suppressing gas mixture by the combustible material 131 flow through a filter 127, and a discharge diffuser 146 for directing the gas mixture within the enclosed space. Parkinson et al. do not mention using a non-azide solid propellant. Canterbury et al. teach gas generating compositions used in fire suppression devices comprising non-azide propellants to produce high gas yields at low toxicity. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used in the device of Parkinson et al. a non-azide solid propellant as taught by Canterbury et al. to produce high gas yields at low toxicity. The Parkinson's diffuser 146/206 could be adapted for a 90° or 180° or 360° direction cap.

7. Claims 16-19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holland et al. in view of Hardge as applied to claims 2, 4, 5, 7, 11-13, and 15 above, and further in view of Hock as best understood by the Examiner.

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Holland et al. in view of Hardge teaches all the limitations of the claims except for a screen filter. However, Hock discloses a solid gas generator with a screen filter 82 to cool the mixing gases (see Hock's column 8, lines 66 – column 9, line 8), a perforated diffuser cap 30. Therefore, it would have been obvious to one having ordinary skill in the art to have provided the device of Holland et al in view of Hardge with a screen filter as suggested by Hock. Doing so would provide a better device for human consumption.

With respect to claims 17, 18 and 20, to have the 90⁰ or 360⁰ or 180⁰ direction cap is an obvious matter of design choice to a person of ordinary skill in the art.

Response to Arguments

8. Applicant's arguments filed 12/13/05 have been fully considered but they are not persuasive. With respect to Applicant remarks for claim 7, the "clean agent system" has never been claimed in the claim by the Applicant.

9. Applicant's arguments with respect to claims 2-5, 7, 11-13, 15-20 have been considered but are moot in view of the new ground(s) of rejection.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dinh Q. Nguyen whose telephone number is 571-272-4907. The examiner can normally be reached on Monday-Thursday 6:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Scherbel can be reached on 571-272-4919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Dinh Q. Nguyen', with a long horizontal flourish extending to the right.

Dinh Q. Nguyen
Primary Examiner
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dqn